



Learning from Program Evolution Over Time

Improving Stormwater Permitting and
Implementation Approaches

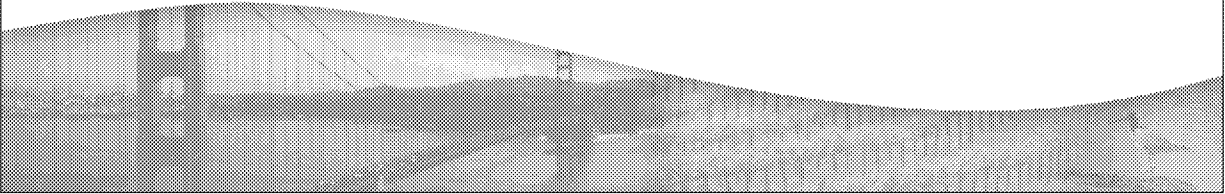
October 17, 2018

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SF Bay Water Board



MS4 Permit Improvements

- 💧 Simplify permit
- 💧 Define maximum extent practicable
- 💧 Water-quality based
- 💧 Reward funded, long-term multi-benefit plans
- 💧 *Smarter reporting and monitoring*



Simplify Permits

Make clear, concise, and auditable

Use performance metrics

Minimize/avoid need to approve plans

**Standardize for consistency and
economy of scale benefits**

MS4 Permit MEP Elements



MRP 2 includes requirements intended to ensure that discharges of pollutants via the storm drain system are appropriately minimized. It's built around the program areas shown here, which are required by the Clean Water Act. For example, municipal operations, which includes ensuring that municipal corporation yards are operated in a clean way, and industrial and commercial controls, which includes a robust municipal business inspection and enforcement program. MRP 2 follows the structure of MRP 1, in which we've dedicated sections to each of the required components.

As I said, I will focus on areas where there are significant changes between MRP 1 and 2—requirements to reduce PCBs and mercury, and for new and redevelopment projects—plus some other, relatively more minor changes. Otherwise, in most respects, MRP 2 is similar to the previous permit.

Maximum Extent Practicable

Establish list of controls in each basic program element (e.g., muni operations)

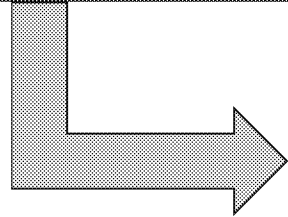


Set MEP performance-metrics for each element or aggregate(s)



Consider scope/effort tiers or scales based on watershed / community characteristics

Public Info and
Participation
performance metric



Support for
funding
initiative

Water Quality Based Controls

Establish list of controls for specific or combinations of pollutants

- 💧 Within various watershed and community settings
- 💧 With effectiveness metrics
= Unit of action benefit, cost, and confidence
- 💧 Consider surrogates
e.g., percent directly connected impervious surface area

Water Quality Based Controls

Apply knowledge of
pollutant source
and treatment
controls into models

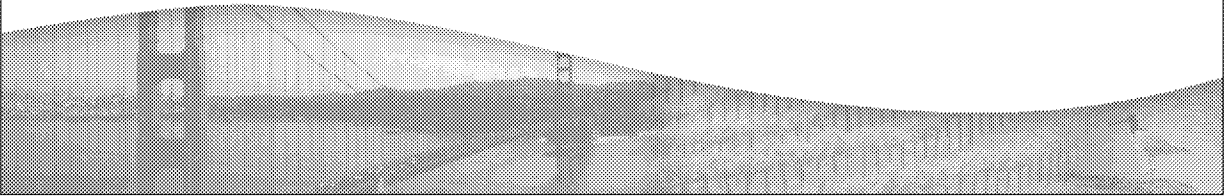
- Predict and plan reductions over time
- Appropriate model scale and complexity

Determine iterative
permit-term
requirements for
pollutant(s)

- Based on commitments and updated MEP assessment

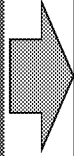
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Reward funded, long-term multi-benefit plans

- Asset management
- Green infrastructure
- Resource management and protection
- Commitment
- Reasonable assurance



- Self-determination
- Alternative compliance
- Requirement exception(s)
- Account for other stuff
- More time!